

# Component Documentation

A versatile, feature-rich list component that supports single and multi-selection, integrates with Angular forms, and provides extensive customization options including avatars, icons, and action buttons. Built with accessibility in mind and designed for complex data display scenarios.

## How to use

Note : The List component is standalone and includes all necessary dependencies. The AavaListItemsComponent is used for individual list items with content projection.

## Basic Usage

Simple list implementations with avatars, icons, and basic selection functionality.

```

<aava-list>
  <aava-list-items *ngFor="let profile of userProfiles">
    <div left>
      <aava-avatars
        size="large"
        shape="pill"
        [imageUrl]="sampleImageUrl"
      ></aava-avatars>
    </div>
    <div middle>
      <h4>{{ profile.heading }}</h4>
      <p>{{ profile.description }}</p>
    </div>
    <div right>
      <aava-icon
        [iconName]="'arrow-right'"
        iconColor="#000000ff"
        iconSize="24"
      ></aava-icon>
    </div>
  </aava-list-items>
</aava-list>

---

sampleImageUrl = "assets/1.svg";

userProfiles = [
  {
    id: 1,
    heading: "Heading comes here",
    description: "Description text goes here",
    avatarUrl: "https://randomuser.me/api/portraits/men/1.jpg",
    iconName: "chevron-right",

    button: {
      text: "label",
      variant: "primary" as ButtonVariant,
      color: "#1976d2",
      action: "view_profile",
    },
  },
  {
    id: 2,
    heading: "Heading comes here",
    description: "Description text goes here",
    avatarUrl: "https://randomuser.me/api/portraits/women/2.jpg",
    iconName: "chevron-right",
    button: {
      text: "label",
      variant: "secondary" as ButtonVariant,
      color: "#388e3c",
      action: "contact",
    },
  },
  {
    id: 3,
    heading: "Heading comes here",
    description: "Description text goes here",
    avatarUrl: "https://randomuser.me/api/portraits/men/3.jpg",
  }
]

```

```
iconName: "chevron-right",
button: {
  text: "label",
  variant: "primary" as ButtonVariant,
  color: "#f57c00",
  action: "view_portfolio",
},
},
];
```

## Multi-Selection

Advanced multi-selection capabilities with checkboxes, selection limits, and programmatic control.

```

import { Component } from '@angular/core';
import {ListComponent} from '@aava/play-comp-library';

@Component({
  selector: 'app-list-multi-select',
  standalone: true,
  imports: [ListComponent],
  template: `
    <div class="demo-container">
      <h3>Multi-Selection List</h3>

      <div class="multi-select-examples">
        <div class="example-section">
          <h4>Basic Multi-Select</h4>
          <aava-list
            [items]="basicItems"
            [title]="'Select Multiple Items'"
            [multiSelect]="true"
            (onSelectionChanged)="onSelectionChanged($event)"
          ></aava-list>
        </div>

        <div class="example-section">
          <h4>Multi-Select with Checkboxes</h4>
          <aava-list
            [items]="checkboxItems"
            [title]="'Select with Checkboxes'"
            [multiSelect]="true"
            [showCheckboxes]="true"
            (onSelectionChanged)="onCheckboxSelectionChanged($event)"
          ></aava-list>
        </div>

        <div class="example-section">
          <h4>Limited Multi-Select (Max 3)</h4>
          <aava-list
            [items]="limitedItems"
            [title]="'Select Up to 3 Items'"
            [multiSelect]="true"
            [maxSelections]="3"
            (onSelectionChanged)="onLimitedSelectionChanged($event)"
          ></aava-list>
        </div>
      </div>

      <div class="control-buttons">
        <button (click)="selectAll()" class="btn btn-primary">Select All</button>
        <button (click)="clearSelection()" class="btn btn-secondary">Clear Selection</button>
        <button (click)="selectSpecific()" class="btn btn-success">Select Items 1, 3, 5</button>
      </div>

      <div class="selection-outputs">
        <div class="output-section">
          <h4>Basic Multi-Select Output</h4>
          <div class="output-content">
            <p><strong>Selected Items:</strong> {{ basicSelection.selectedItems.map(item => item.title) | join(', ') }}</p>
            <p><strong>Selected IDs:</strong> {{ basicSelection.selectedIds.join(', ') || 'None' }}</p>
            <p><strong>Count:</strong> {{ basicSelection.selectedItems.length }}</p>
          </div>
        </div>
      </div>
    </div>
  `});

```

```
<div class="output-section">
  <h4>Checkbox Selection Output</h4>
  <div class="output-content">
    <p><strong>Selected Items:</strong> {{ checkboxSelection.selectedItems.map(item => item.t
    <p><strong>Selected IDs:</strong> {{ checkboxSelection.selectedIds.join(', ') || 'None' }
    <p><strong>Count:</strong> {{ checkboxSelection.selectedItems.length }}</p>
  </div>
</div>

<div class="output-section">
  <h4>Limited Selection Output</h4>
  <div class="output-content">
    <p><strong>Selected Items:</strong> {{ limitedSelection.selectedItems.map(item => item.t
    <p><strong>Selected IDs:</strong> {{ limitedSelection.selectedIds.join(', ') || 'None' }
    <p><strong>Count:</strong> {{ limitedSelection.selectedItems.length }} / 3</p>
    <p><strong>Can Select More:</strong> {{ limitedSelection.selectedItems.length < 3 ? 'Yes
  </div>
</div>
</div>

<div class="usage-tips">
  <h4>Multi-Selection Tips:</h4>
  <ul>
    <li><strong>Multi-Select Mode:</strong> Set `multiSelect="true"` to enable multiple select
    <li><strong>Checkboxes:</strong> Use `showCheckboxes="true"` for visual checkbox indicator
    <li><strong>Max Selections:</strong> Set `maxSelections` to limit the number of selectable
    <li><strong>Event Handling:</strong> Use `onSelectionChanged` for multi-select events</li>
    <li><strong>Programmatic Control:</strong> Use `selectAll()`, `clearSelection()`, and `sel
  </ul>
</div>
</div>
``,
styles: [`
  .demo-container {
    max-width: 1200px;
    margin: 20px 0;
  }

  .multi-select-examples {
    display: grid;
    grid-template-columns: repeat(auto-fit, minmax(350px, 1fr));
    gap: 32px;
    margin: 20px 0;
  }

  .example-section {
    padding: 20px;
    border: 1px solid #e9ecef;
    border-radius: 8px;
    background: #f8f9fa;
  }

  .example-section h4 {
    margin-top: 0;
    margin-bottom: 16px;
    color: #495057;
    font-size: 16px;
  }

  .control-buttons {

```

```
display: flex;
gap: 12px;
margin: 24px 0;
flex-wrap: wrap;
}

.btn {
  padding: 8px 16px;
  border: none;
  border-radius: 4px;
  cursor: pointer;
  font-size: 14px;
  transition: background-color 0.2s;
}

.btn-primary {
  background: #007bff;
  color: white;
}

.btn-primary:hover {
  background: #0056b3;
}

.btn-secondary {
  background: #6c757d;
  color: white;
}

.btn-secondary:hover {
  background: #545b62;
}

.btn-success {
  background: #28a745;
  color: white;
}

.btn-success:hover {
  background: #1e7e34;
}

.selection-outputs {
  display: grid;
  grid-template-columns: repeat(auto-fit, minmax(300px, 1fr));
  gap: 20px;
  margin: 24px 0;
}

.output-section {
  padding: 16px;
  border: 1px solid #e9ecef;
  border-radius: 6px;
  background: #f8f9fa;
}

.output-section h4 {
  margin-top: 0;
  margin-bottom: 12px;
  color: #495057;
```

```
    font-size: 14px;
}

.output-content p {
  margin: 4px 0;
  font-size: 13px;
  color: #495057;
}

.usage-tips {
  margin-top: 24px;
  padding: 16px;
  background: #d1f2eb;
  border-radius: 6px;
  border-left: 4px solid #20c997;
}

.usage-tips h4 {
  margin-top: 0;
  color: #0f5132;
}

.usage-tips ul {
  margin: 8px 0;
  padding-left: 20px;
}

.usage-tips li {
  margin: 4px 0;
  color: #0f5132;
}

.usage-tips strong {
  color: #051b11;
}

@media (max-width: 768px) {
  .multi-select-examples {
    grid-template-columns: 1fr;
    gap: 20px;
  }
}

.selection-outputs {
  grid-template-columns: 1fr;
  gap: 16px;
}

.control-buttons {
  flex-direction: column;
}
}

`]

})

export class ListMultiSelectDemo {
  basicSelection = { selectedItems: [], selectedIds: [] };
  checkboxSelection = { selectedItems: [], selectedIds: [] };
  limitedSelection = { selectedItems: [], selectedIds: [] };

  basicItems = [
    { id: '1', title: 'Item 1', subtitle: 'First item' },
    { id: '2', title: 'Item 2', subtitle: 'Second item' },
    { id: '3', title: 'Item 3', subtitle: 'Third item' },
    { id: '4', title: 'Item 4', subtitle: 'Fourth item' },
    { id: '5', title: 'Item 5', subtitle: 'Fifth item' },
    { id: '6', title: 'Item 6', subtitle: 'Sixth item' },
    { id: '7', title: 'Item 7', subtitle: 'Seventh item' },
    { id: '8', title: 'Item 8', subtitle: 'Eighth item' },
    { id: '9', title: 'Item 9', subtitle: 'Ninth item' },
    { id: '10', title: 'Item 10', subtitle: 'Tenth item' }
  ];
}
```

```

        { id: '2', title: 'Item 2', subtitle: 'Second item' },
        { id: '3', title: 'Item 3', subtitle: 'Third item' },
        { id: '4', title: 'Item 4', subtitle: 'Fourth item' },
        { id: '5', title: 'Item 5', subtitle: 'Fifth item' }
    ];

checkboxItems = [
    { id: '1', title: 'Task 1', subtitle: 'Complete documentation' },
    { id: '2', title: 'Task 2', subtitle: 'Review code' },
    { id: '3', title: 'Task 3', subtitle: 'Write tests' },
    { id: '4', title: 'Task 4', subtitle: 'Deploy to staging' },
    { id: '5', title: 'Task 5', subtitle: 'Update dependencies' }
];

limitedItems = [
    { id: '1', title: 'Option A', subtitle: 'First option' },
    { id: '2', title: 'Option B', subtitle: 'Second option' },
    { id: '3', title: 'Option C', subtitle: 'Third option' },
    { id: '4', title: 'Option D', subtitle: 'Fourth option' },
    { id: '5', title: 'Option E', subtitle: 'Fifth option' }
];

onSelectionChanged(event: any) {
    this.basicSelection = event;
    console.log('Basic selection changed:', event);
}

onCheckboxSelectionChanged(event: any) {
    this.checkboxSelection = event;
    console.log('Checkbox selection changed:', event);
}

onLimitedSelectionChanged(event: any) {
    this.limitedSelection = event;
    console.log('Limited selection changed:', event);
}

selectAll() {
    // This would be called on the list component reference
    console.log('Select all clicked');
}

clearSelection() {
    // This would be called on the list component reference
    console.log('Clear selection clicked');
}

selectSpecific() {
    // This would be called on the list component reference
    console.log('Select specific items clicked');
}
}

```

## Multi-Selection Features

- Checkbox Mode : Visual checkboxes for clear selection indication
- Selection Limits : Set maximum number of selectable items
- Programmatic Control : `selectAll()` , `clearSelection()` , and `selectItems()` methods

- Event Handling : Comprehensive selection change events with detailed information

## Accessibility

WCAG 2.1 AA compliant with comprehensive keyboard navigation and screen reader support.

## Accessibility Features

- Keyboard Navigation : Full keyboard support with arrow keys, tab, enter, and escape
- ARIA Support : Comprehensive ARIA labels, roles, and state announcements
- Screen Reader : Descriptive labels and status announcements
- Focus Management : Clear visual focus indicators and logical tab order
- High Contrast : Enhanced visibility in high contrast modes
- Testing Checklist : Complete accessibility testing guidelines

## Component Architecture

The List component consists of two main parts:

### AavaListComponent

The main list container that handles selection, validation, and form integration.

### AavaListItemsComponent

Individual list item wrapper with content projection slots and styling.

## Content Projection Slots

- [left] : For avatars, icons, or left-aligned content
- [middle] : For main content like titles and subtitles
- [right] : For action buttons or right-aligned content
- Default slot : For any additional content

## API Reference

### Inputs

Property	Type	Default	Description
title	string	"	Title displayed above the list
items	ListItem[]	[]	Array of list items to display
height	string	'400px'	Height of the list container
width	string	'100%'	Width of the list container

Property	Type	Default	Description
emptyLabel	string	'No items available'	Text displayed when list is empty
multiSelect	boolean	false	Enable multi-selection mode
maxSelections	number	undefined	Maximum number of items that can be selected
selectedItemId	string   null	null	Currently selected item ID (single select)
selectedItemIds	string[]	[]	Array of selected item IDs (multi-select)
showCheckboxes	boolean	false	Show checkboxes for multi-selection
selectionMode	'click'   'checkbox'	'click'	Selection interaction mode
required	boolean	false	Whether the list selection is required
errorMessage	string	'Please select at least one item'	Custom error message
errorPosition	'top'   'bottom'	'bottom'	Position of error message
showErrorImmediately	boolean	true	Show error immediately or wait for touch

## ListItemsComponent Inputs

Property	Type	Default	Description
selected	boolean	false	Whether the item is selected
disabled	boolean	false	Whether the item is disabled
outline	boolean	false	Whether to show outline styling
size	ListItemSize	'md'	Size variant (xs, sm, md, lg)

## Outputs

Event	Type	Description
onOptionSelected	EventEmitter	Emitted when an item is selected
onSelectionChanged	EventEmitter	Emitted when selection changes
onButtonClick	EventEmitter	Emitted when an item button is clicked
onIconClick	EventEmitter<{item: ListItem, event: Event}>	Emitted when an item icon is clicked

## ListItemsComponent Outputs

Event	Type	Description
itemClick	EventEmitter	Emitted when the item is clicked

## Properties

Property	Type	Description
value	string   string[]   null	Current form value (getter/setter)
disabled	boolean	Whether the component is disabled
touched	boolean	Whether the component has been touched
hasError	boolean	Whether the component has validation errors

## Methods

Method	Parameters	Return	Description
selectAll()	None	void	Select all available items (multi-select only)
clearSelection()	None	void	Clear all selections
selectItems(itemIds: string[])	itemIds: string[]	void	Select specific items by ID

Method	Parameters	Return	Description
validate()	None	boolean	Manually trigger validation
resetValidation()	None	void	Reset validation state
hideErrorImmediately()	None	void	Hide error message immediately
showErrorImmediately	Method()	None	Show error message immediately
trackByFn(index: number, item: ListItem)	index: number, item: ListItem	string	Track function for efficient rendering
trackByButtonFn(index : number, button: ListItemButton)	index: number, button: ListItemButton	string	Track function for button rendering
onItemClick(item: ListItem, event?: Event)	item: ListItem, event?: Event	void	Handle item click events
onCheckboxChange(item: ListItem, event: Event)	item: ListItem, event: Event	void	Handle checkbox change events
onItemButtonClick(item: ListItem, button: ListItemButton, buttonIndex: number, event: Event)	item: ListItem, button: ListItemButton, buttonIndex: number, event: Event	void	Handle button click events
onItemIconClick(item: ListItem, event: Event)	item: ListItem, event: Event	void	Handle icon click events
hasAvatar(item: ListItem)	item: ListItem	boolean	Check if item has avatar
hasIcon(item: ListItem)	item: ListItem	boolean	Check if item has icon
hasButtons(item: ListItem)	item: ListItem	boolean	Check if item has buttons
isIconClickable(item: ListItem)	item: ListItem	boolean	Check if icon is clickable
canSelectMore()	None	boolean	Check if more items can be selected
isEmpty()	None	boolean	Check if selection is empty

Method	Parameters	Return	Description
isClickOnActionElement(event: Event)	event: Event	boolean	Check if click is on action element

## Interfaces

### ListItem

### ListButtonItem

### ListSelectionEvent

### ListButtonClickEvent

### ListItemSize

## Design Tokens & Theming

AAVA Play List uses semantic design tokens for all surfaces, spacing, radius, and motion. The component exposes scoped override tokens for fine-tuning appearance while maintaining design system consistency.

## Available Design Tokens for List

### Container Tokens

Token	Purpose	Default Value
--list-container-border-radius	Border radius of list container	Theme-based
--list-container-padding	Padding inside list container	Theme-based
--list-container-gap	Gap between list elements	Theme-based
--list-container-border	Border style for list container	Theme-based
--list-background-color	Background color of list	Theme-based

### Typography Tokens

Token	Purpose	Default Value
--list-title-color	Color for list title	Theme-based
--list-title-size	Font size for list title	Theme-based
--list-title-weight	Font weight for list title	Theme-based
--list-title-font-family	Font family for list title	Theme-based
--list-item-color	Color for list item text	Theme-based

Token	Purpose	Default Value
--list-item-subtitle-color	Color for subtitle text	Theme-based

## Item Layout Tokens

Token	Purpose	Default Value
--list-items-gap	Gap between list items	Theme-based
--list-item-gap	Gap within list item elements	Theme-based
--list-item-padding	Padding inside list items	Theme-based
--list-item-border-radius	Border radius of list items	Theme-based
--list-item-background	Background color of list items	Theme-based
--list-item-border-color	Border color for list items	Theme-based

## Selection & State Tokens

Token	Purpose	Default Value
--list-item-active-border	Border style for selected items	Theme-based
--list-active-bg	Background color for selected items	Theme-based
--list-buttons-gap	Gap between action buttons	Theme-based

## Error & Validation Tokens

Token	Purpose	Default Value
--list-error-text	Color for error messages	Theme-based
--list-error-font-size	Font size for error text	Theme-based
--list-disable-color	Color for disabled elements	Theme-based

## Token Override Example

### Best Practices

### Design Guidelines

- Content Structure : Use clear, descriptive titles and subtitles for better scanability
- Avatar Usage : Provide meaningful avatar content (images or initials) for user identification
- Icon Integration : Use appropriate icons that enhance understanding without cluttering
- Action Buttons : Limit the number of action buttons per item to maintain clean interface

- Selection Patterns : Choose single selection for mutually exclusive choices, multi-selection for independent choices

## Component Architecture

- Content Projection : Use the aava-list-items component for consistent item rendering
- Slot System : Utilize left, middle, right, and default slots for flexible content layout
- Event Handling : Properly handle click events to avoid conflicts between item selection and button actions
- Performance : Use trackBy functions for efficient rendering of large lists
- State Management : Leverage the built-in selection state management for consistent behavior

## Accessibility

- Clear Labeling : Ensure all interactive elements have descriptive, meaningful labels
- Keyboard Navigation : Test complete keyboard navigation flow including arrow keys and activation
- Screen Reader Support : Verify proper announcement of selection changes and item states
- Color Contrast : Maintain sufficient contrast for all text and interactive elements
- Focus Management : Provide clear visual focus indicators and logical tab order

## Performance

- OnPush Strategy : Component uses OnPush change detection for optimal performance
- TrackBy Functions : Efficient rendering with custom trackBy functions for large lists
- Lazy Loading : Consider lazy loading patterns for very large datasets
- Virtual Scrolling : Implement virtual scrolling for lists with hundreds or thousands of items
- Event Optimization : Debounce rapid selection changes and optimize event handlers
- Memory Management : Automatic cleanup of event listeners and references
- Rendering Optimization : Conditional rendering based on item properties and states

## Form Integration

- Validation Strategy : Always validate required selections with clear error messages
- Form Patterns : Use reactive forms for complex validation scenarios
- Default Values : Set appropriate default selections for better user experience
- Reset Behavior : Define clear reset and initial state behavior for forms
- Cross-Field Validation : Implement proper validation relationships between form fields
- ControlValueAccessor : Full implementation for seamless form integration
- Touch Management : Automatic touch state management for validation timing
- Error Display Control : Programmatic control over error message visibility